

BOOK REVIEW

B.G. BOWES. 2000. **A Color Atlas of Plant Structure**. (ISBN 0-8138-2693-4, pbk.). Iowa State Press, 2121 State Avenue, Ames, IA 50014, U.S.A. (Orders: 1-800-862-6657, 1-515-292-3348 fax; www.iowastatepress.com). \$49.95, 192 pp, numerous color plates, 7 3/4" × 10 1/4".

The amount of information generated in the many fields of plant science is growing at an exponential rate. The detailed study of plant anatomy should be a vital component in the training for any student of plant biology. However, with the advent of new analytical techniques in molecular biology, biochemistry, and physiology, many students cannot find the time in their program of study to include a course in basic plant anatomy. In fact, in some botany programs it is even difficult to find a faculty member who has sufficient training in this field to provide students with a solid background.

This book provides a long-awaited solution to both of these problems. One of the most difficult tasks for instructors teaching beginning botany students is to teach them how to understand plant anatomy using microscopic cross-sections of the various organs. Part of that difficulty lies either with the student's inexperience in using microscopes, or in the poor quality of microscopes used in teaching many undergraduate laboratories.

Bryan Bowes' *Color Atlas of Plant Structure* is a beautifully illustrated and concise introduction to the fascinating world of plant anatomy. Each chapter consists of several pages of text, with abundant references to illustrations on the following pages. The text is concise and to the point, leaving much of the detailed description to be presented with the illustrations themselves. Those illustrations are captioned with a wealth of information. Structures referred to in the captions are numbered, not lettered or labeled, which makes each photograph easier to understand.

The organization of the book follows that presented in many basic botany courses. The first chapter provides an overview of the major Divisions of vascular and non-vascular plants, and concludes with a brief introduction to the gross morphology of flowering plants. Chapters 2-4 provide a discussion of plant cells, tissues and embryology. Chapters 5-8 deal with leaf, stem, root, and floral anatomy.

The illustrations themselves are beautifully done, and each is labeled to indicate the type of microscopy used to create the photograph. There are two or three photographs on each page, and the captions are arranged in such a way that it is easy to determine which caption refers to which photo. The only difficulty this reviewer had with the illustrations was that occasionally the numbers referring to salient points, were difficult to see on the photographs.

This book is a wonderful reference for anyone involved in the plant sciences. It should be a required text or at least an available reference in all basic botany and taxonomy classes, and deserves a place in the personal libraries of botanists, horticulturalists, naturalists and natural history artists alike.—*Debra Trock, Collections Manager, Botanical Research Institute of Texas, Fort Worth, TX 76102-4060, U.S.A.*